PERMIT APPLICATION REVIEW
TEMPORARY COVERED SOURCE PERMIT NO. 0578-01-CT
Application for Initial Temporary Covered Source No. 0578-02

Company:	William C. Loeffler Construction, Inc.
Mailing Address:	1451 Kinoole Street Hilo, Hawaii 96720
Facility:	Stone Processing Plant
Location:	Various Temporary Sites, State of Hawaii
Initial Location:	9093 Wiliama Street, Keaau, Hawaii
SIC Code:	1429 (Crushed and Broken Stone, Not Elsewhere Classified)
Responsible Official:	Ms. Carolyn Loeffler Vice President 1451 Kinoole Street Hilo, Hawaii 96720 (808) 935-4420
Contact:	Mr. William Loeffler President 1451 Kinoole Street Hilo, Hawaii 96720 (808) 935-4420

PROPOSED PROJECT

William C. Loeffler Construction proposes to operate a mobile crushing plant for stone processing activities. The equipment was previously permitted under CSP 0569-01-CT, Williams Construction Corporation. The equipment will be used to crush rock and other materials for construction purposes. Materials will be dropped into the jaw crusher and then conveyed to a stockpile.

The equipment consists of one track-mounted 340 TPH Extec C12 jaw crusher. The primary crusher is self-propelled by the integrated 310 hp diesel engine. The engine will not be subject to the permit since it propels the crusher and is exempt pursuant to HAR §11-60.1-82(d)(4), which exempts internal combustion engines propelling mobile sources.

There will be no operating limitations for the proposed stone processing plant.

EQUIPMENT DESCRIPTION

Facility Equipment				
Equipment	Manufacturer	Model No.	Serial No.	Manuf. Date
340 TPH mobile jaw crusher, water spray system, various conveyors	Extec	C12	6908	2001
310 hp diesel engine (Exempt)	Caterpillar	3306BDITA	64Z31751	2001

AIR POLLUTION CONTROLS

The crushing plant is equipped with water spray systems to control fugitive dust. Water trucks/water sprays will be used as necessary to minimize fugitive dust from plant operations, material transfer points, stockpiles, and plant roads.

APPLICABLE REQUIREMENTS

Hawaii Administrative Rules (HAR)
Title 11 Chapter 59, Ambient Air Quality Standards
Title 11 Chapter 60.1, Air Pollution Control
- Subchapter 1, General Requirements
- Subchapter 2, General Prohibitions
  - 11-60.1-31, Applicability
  - 11-60.1-32, Visible Emissions
  - 11-60.1-33, Fugitive Dust
- Subchapter 5, Covered Sources
- Subchapter 6, Fees for Covered Sources, Noncovered Sources, and Agricultural Burning
  - 11-60.1-111, Definitions
  - 11-60.1-112, General Fee Provisions for Covered Sources
  - 11-60.1-113, Application Fees for Covered Sources
  - 11-60.1-114, Annual Fees for Covered Sources
  - 11-60.1-115, Basis of Annual Fees for Covered Sources
- Subchapter 8, Standards of Performance for Stationary Sources
  - 11-60.1-161, New Source Performance Standards
- Subchapter 9, Hazardous Air Pollutant Sources
- Subchapter 10, Field Citations

Standards of Performance for New Stationary Sources (NSPS), 40 Code of Federal Regulations (CFR) Part 60
Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants is applicable to the stone processing and screening plant because the maximum capacity of the plant is greater than 150 tons/hour, and the plant was manufactured after August 31, 1983.

The 340 TPH Extec mobile jaw crusher (2001) was manufactured before April 22, 2008. Equipment that commence construction, modification, or reconstruction on or after April 22, 2008, are subject to more stringent fugitive emission opacity limits.

National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 61
This source is not subject to NESHAPs because there are no standards in 40 CFR Part 61 applicable to this facility.

Prevention of Significant Deterioration (PSD), 40 CFR Part 52, §52.21
This source is not subject to PSD requirements because it is not a major stationary source as defined in 40 CFR §52.21 and HAR, Title 11, Chapter 60.1, Subchapter 7.

Compliance Assurance Monitoring (CAM), 40 CFR 64
This source is not subject to CAM because the facility is not a major source. The purpose of CAM is to provide a reasonable assurance that compliance is being achieved with large emissions units that rely on air pollution control device equipment to meet an emissions limit or standard. Pursuant to 40 CFR Part 64, for CAM to be applicable, the emissions unit must: (1) be located at a major source; (2) be subject to an emissions limit or standard; (3) use a control device to achieve compliance; (4) have potential pre-control emissions that are 100% of the major source level; and (5) not otherwise be exempt from CAM.

Air Emissions Reporting Requirements (AERR), 40 CFR Part 51, Subpart A
AERR is not applicable because potential emissions from the facility do not exceed AERR thresholds.

CAB In-house Annual Emissions Reporting
The Clean Air Branch (CAB) requests annual emissions reporting from those facilities that have facility wide emissions exceeding in-house reporting levels and for all covered sources. Annual emissions reporting will be required because this facility is a covered source.

Best Available Control Technology (BACT)
This source is not subject to BACT analysis because potential emissions due to the facility is below significance levels. BACT analysis is required for new sources or modifications to sources that have the potential to emit or increase emissions above significant levels considering any limitations as defined in HAR, §11-60.1-1.

Synthetic Minor Source
A synthetic minor source is a facility that is potentially major, as defined in HAR, §11-60.1-1, but is made non-major through federally enforceable permit conditions. This facility is not a synthetic minor source because potential emissions do not exceed major source thresholds when the facility is operated without limitations for 8,760 hours/year.

EXEMPT ACTIVITIES

The proposed primary jaw crusher, Extec C12, is self-propelled by the integrated 310 hp Caterpillar diesel engine. The engine propels the crusher and is exempt pursuant to HAR §11-60.1-82(d)(4), which exempts internal combustion engines propelling mobile sources.

ALTERNATIVE OPERATING SCENARIOS

No alternate operating scenarios incorporated into permit.

PROJECT EMISSIONS

Total facility emissions are summarized in the tables below:

340 TPH Stone Processing Plant Total Facility Emissions and Trigger Levels (TPY)					
Pollutant	Emissions (No Limits)	BACT Significant Levels	AERR Thresholds	DOH Levels	Storage Pile and Vehicle Travel Emissions
CO	0	100	1000	250	0
NO_X	0	40	100	25	0
SO_2	0	40	100	25	0
PM	2.46	25	-	25	29.15
PM-10	1.06	15	100	25	7.12
PM-2.5	0.26	10	100	-	0.71
VOC	0	40	100	25	0
HAPs	0	-	-	5	0

Greenhouse Gas (GHG) Emissions

There are no GHG emissions because emissions from the stone processing plant consist of only fugitive particle matter and the diesel engine is exempt from permitting requirements.

AIR QUALITY ASSESSMENT

An ambient air quality impact analysis (AAQIA) is generally required for new or modified sources to demonstrate compliance with State and National ambient air quality standards.

An AAQIA is not required for the proposed exempt nonroad diesel engine on the Extec C12 jaw crushing (track-mounted) plant. Other emissions from the proposed crusher is fugitive in nature and do not require an ambient air quality impact analysis.

SIGNIFICANT PERMIT CONDITIONS

The Extec C12 jaw crushing plant construction date is before April 22, 2008. Performance testing, reporting and recordkeeping are needed in the permit to meet the requirements of 40 CFR 60, Subpart OOO.

The Extec C12 jaw crushing plant shall not cause to be discharged into the atmosphere from the mobile crusher, fugitive emissions which exhibit greater than fifteen (15) percent opacity from the crusher and ten (10) percent opacity form any transfer point on the belt conveyors, screening operation, or from any other affected facility associated with the mobile crusher.

CONCLUSION

William C. Loeffler Construction has submitted an application for a proposed 340 TPH Extec C12 mobile stone processing plant. The emissions are below significant levels.

Recommend issuance of the covered source permit subject to the incorporation of the permit conditions, forty five-day (45-day) Environmental Protection Agency review period, and thirty (30) day public comment period.

Joseph Baumgartner
August 16, 2016